## AMENDMENTS TO THE CLAIMS

1. - 5. (Cancelled)

6. (Previously presented) An isolated peptide consisting essentially of an amino acid sequence represented by any one of SEQ ID NOS: 4 to 12 or 14 to 17.

7. - 9. (Cancelled)

10. (Previously presented) A method for diagnosing Alzheimer's disease, comprising:

obtaining a sample of body fluid or tissues taken from a subject,

determining quantitatively the amount of the peptide according to claim 6 present in said sample,

wherein Alzheimer's disease is indicated when the amount of said peptide is greater than the amount of said peptide present in a control non-Alzheimer's disease sample.

11. (Previously Presented) The method according to claim 10, wherein said sample of body fluid is blood or cerebrospinal fluid.

12. (Currently Amended) The method according to claim 10, **further which further comprises determining** ~~wherein~~ a ratio of a high-molecular-weight peptide consisting of **a fragment of SEQ ID NO:1** ~~any one of SEQ ID NOS: 4 to 12 or 14 to 17 and one or more additional amino acids of SEQ ID NO: 1 compared to~~ **and** a peptide consisting essentially of any one of SEQ ID NOS: 4 to 12 or 14 to 17**, wherein the fragment of SEQ ID NO:1 has a higher molecular weight than the peptide consisting essentially of any of SEQ ID NOS: 4 to 12 or 14 to 17; and using said ratio** ~~is used~~ as an indicator for diagnosing Alzheimer's disease**, wherein an elevated ratio or an increase in the ratio when compared to a baseline ratio is indicative of Alzheimer's disease**.

13. (Currently Amended) A method for screening a therapeutic agent for Alzheimer's disease, comprising:

contacting cells containing the isolated peptide according to claim 6 with an agent to be screened; and

determining a change in the amount of the peptide or a change in a molecular species of the peptide, wherein

said molecular species is a high-molecular-weight peptide which is **fragment of SEQ ID NO:1** ~~a peptide consisting of any one of SEQ ID NOS: 4 to 12 or 14 to 17 with one or more additional amino acids of SEQ ID NO: 1~~;

said change in the amount of the peptide is a decrease in the amount of the peptide and is caused by said agent to be screened; and

said change in the molecular species of the peptide is a change from the high-molecular-weight peptide to a peptide of any one of SEQ ID NOS: 4 to 12 or 14 to 17**, which is smaller than said high-molecular weight peptide** and is caused by said agent to be screened**;**

**selecting any agent which causes decrease in the amount of the peptide or the amount of molecular species as a potential therapeutic agent for Alzheimer's disease**.

14. (Withdrawn, Currently Amended) An antibody against the peptide according to claim ~~1~~ 6 .

15. (Withdrawn) A diagnostic reagent for Alzheimer's disease, the reagent comprising the antibody according to claim 14.

16. (Previously Presented) The method according to claim 10, wherein said sample is brain tissue.

17. (Previously presented) The method according to claim 13, wherein the detection of a decrease in the amount of the peptide caused by said agent or detection of a peptide selected from the group consisting of SEQ ID NOS: 4 to 12 or 14 to 17 caused by said agent is by Western blotting, dot blotting, ELISA, sandwich ELISA, radioimmunoassay, immunoprecipitation; mass spectrometry using a MALDI-TOF/MS; and combinations thereof.

18. (Previously presented) The method of claim 10 which further comprises measuring the amount of a first peptide consisting essentially of any one of SEQ ID NOS: 4 to 16 and comparing the amount of said peptide to the amount of a high-molecular-weight peptide, wherein said high-molecular weight peptide is a cleavage product of SEQ ID NO:1, which has a higher molecular weight than said first peptide.

19. (Currently amended) A method for screening a therapeutic agent for Alzheimer's disease, comprising:

contacting cells ~~containing the isolated peptide according to claim 6~~ **which express a peptide consisting of SEQ ID NOS: 4 to 12 or 14 to 17** with an agent to be screened; and

determining a change in the amount of the peptide or a change in a molecular species of the peptide, wherein said molecular species is a high-molecular-weight peptide and said high-molecular weight peptide is a cleavage product of SEQ ID NO:1 **that has a higher molecular weight than said peptide**~~, which has a higher molecular weight than first peptide~~,

wherein said change in the amount of the peptide is a decrease in the amount of the peptide and is caused by said agent to be screened; and

said change in the molecular species of the peptide is a change from the high-molecular-weight peptide to **a peptide consisting of SEQ ID NOS: 4 to 12 or 14 to 17, which is smaller than said molecular species** ~~the peptide~~ and is caused by said agent to be screened**;**

**selecting any agent which causes decrease in the amount of the peptide or the amount of molecular species as a potential therapeutic agent for Alzheimer's disease**.

20. (New) An isolated peptide consisting of an amino acid sequence represented by any one of SEQ ID NOS: 4 to 12 or 14 to 17.